

Fire Investigator Certification Course

Course Outline

Chapter	Topic (Jones & Bartlett, Fire Investigator, 3 rd edition)	Time	Total Time
1	Administration	1.0	2.5
	Video clips on Fire Investigations (source – YouTube)	1.0	
	Additional review of NFPA 921	0.5	
2	Basic Fire Methodology	2.0	3.0
	Chapter quiz	0.5	
	Review case files	0.5	
3	Basic Fire Science	2.0	2.5
	Chapter quiz	0.5	
4	Fire Patterns	2.0	3.5
	Chapter quiz	0.5	
	Review case files	1.0	
	Exercise #1 assigned		
5	Building Systems	1.5	3.0
	Chapter quiz	0.5	
	Exercise #1 due	1.0	
6	Electricity and Fire	2.0	3.5
	Chapter quiz	0.5	
	View building's electric system	0.5	
	Show examples of wire size and arching	0.5	
7	Fuel Gas Systems	1.5	2.0
	Chapter quiz	0.5	
	Exercise #2 assigned		
8	Fire Related Human Behavior	1.0	3.0
	Review past major fire events	0.5	
	Chapter quiz	0.5	
	Exercise #2 due	1.0	
9	Legal Considerations	3.0	5.0
	Chapter quiz	0.5	
	Review forms used for scene access and searches	1.5	
10	Safety	1.0	1.5
	Chapter quiz	0.5	
11	Source of Information	2.0	5.0
	Activity – Interviewing	1.5	
	Chapter quiz	0.5	
	Additional information on interviewing	1.0	
12	Planning & Preparing an Investigation	2.0	2.5
	Chapter quiz	0.5	
	Exercise #3 assigned		
13	Documentation of the Investigation	2.0	5.0
	Additional activities	1.5	
	Chapter quiz	0.5	
	Exercise #3 due	1.0	
14	Physical Evidence	2.5	3.5
	Chapter activity	0.5	

	Chapter quiz	0.5	
15	Origin Determination	2.0	3.5
	Chapter quiz	0.5	
	Exercise #4 assigned		
	Review case files	1.0	
16	Fire Cause Determination	2.0	4.0
	Chapter activity	0.5	
	Chapter quiz	0.5	
	Exercise #4 due	1.0	
17	Analyzing the Incident for Cause	1.5	3.0
	Chapter quiz	0.5	
	Review case files	1.0	
18	Failure Analysis and Analytical Tools	2.0	3.5
	Chapter quiz	0.5	
	Exercise #5 assigned		
	Review case files	1.0	
19	Explosions	2.0	3.5
	Chapter quiz	0.5	
	Additional information from AFT	1.0	
20	Incendiary Fires	2.0	3.5
	Chapter quiz	0.5	
	Exercise #5 due	1.0	
21	Fire & Explosion Death and Injuries	2.0	3.5
	Chapter quiz	0.5	
	Presentation from County Coroner (suggestion)	1.0	
22	Appliances	1.0	3.5
	Chapter quiz	0.5	
	View different types of appliances	1.0	
	Review case files	1.0	
23	Motor Vehicle Fires	1.5	5.0
	Chapter quiz	0.5	
	View burnt vehicles	3.0	
24	Wildland Fire Investigations	2.0	3.0
	Chapter activity	0.5	
	Chapter quiz	0.5	
25	Management of Complex Investigations	1.5	3.0
	Chapter quiz	0.5	
	Exercise #6 assigned		
	Review case files	1.0	
26	Marine Fire Investigations	1.0	3.5
	Chapter quiz	0.5	
	View boat and motors	1.0	
	Exercise #6 due	1.0	
	Final practical exam – submission of case files	1.0	9.0
	Final practical exam – courtroom presentation	8.0	
	State written exam	3.0	3.0
	Course Total		100.0

NOTE: additional time required for scene examinations (not included)

Additional course information and activities:

- Completion of five (5) CFI Trainer online training sessions
 - Sessions completed outside of class
 - Record of completion turn in by end of course
- Each chapter in the manual has activities at the beginning and at the end for students to complete
- Chapter quizzes are included in instructor guide.
- Videos included under chapter one can be found online. Video clips showing different information on fire investigators. A good source is YouTube, search using “Fire Investigations”
- Scene visits of fire in the area
 - Take every chance the class has to view fire scenes
- Investigation forms
 - Provide copies of forms used by local jurisdiction
 - Take time to go through filling out forms.
- Visit courtroom to view jury trial (suggestion)
 - View court proceedings
- Presentation from local prosecutor (suggestion)
- Provide additional information from other resources throughout the course
 - Fact sheets and charts
 - News articles
 - Research papers
 - Video clips
- Use of burn container to view burn patterns (suggestion)
 - Control fires
 - Use different materials
 - Show different types of burn patterns on different surfaces
- Use outside presenters (suggestion)
 - Detectives, law enforcement officers
 - State fire investigators
 - County Coroner
 - Private investigators (insurance)
 - Crime scene technicians
 - Bomb technicians or ATF agents
 - Experts in their fields (Electricians, repairmen, vehicle mechanics, engineers)
- Exercises are completed and turned into the instructor to be reviewed. After the instructor reviews the work, it can be returned to class and reviewed with the class.
- Course exercises can be found online at <http://www.in.gov/dhs/3082.htm>

Note: Course outline can be adjusted to fit local needs.

Dated: January 2012